

**ABSTRACT OF THE INVENTION**

A system for measuring seat belt forces is used to control deployment of vehicle airbags. The system includes a rigid plate member having one end attached to a portion of the seat belt and an opposite end mounted to a vehicle structure. The seat belt is used to secure passengers or an infant car seat to the vehicle seat. A sensor including a strain gage is mounted on the rigid plate between the ends and is used to measure the magnitude of forces exerted on the seat belt by the passenger or car seat. The strain gage generates a signal representative of the tension in the seat belt, which is used to control deployment of the airbag. The airbag is not deployed if the tension in the seat belt exceeds a predetermined limit.

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